

Algebra 1B Unit 09: Sequences and Series

Content Area: **Math**
Course(s): **Algebra I B**
Time Period: **Semester 2**
Length: **4 cycles**
Status: **Published**

Unit Introduction

Standards

MA.F-IF.A.3	Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers.
MA.A-SSE.B.4	Derive and/or explain the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems.

Essential Questions

- How can you represent the terms of a sequence explicitly? How can you represent them recursively?
- What are equivalent explicit and recursive definitions for an arithmetic sequence?

Content

- Arithmetic Sequences
- Arithmetic Series
- Geometric Sequences
- Geometric Series
- Mathematical Patterns

Skills

- Find common difference of an arithmetic sequence
- Find the common ratio of a geometric sequence
- Identify mathematical patterns
- Identifying geometric sequences
- Write a recursive formula
- Write an explicit formula

